

### **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **LISTING OF CLAIMS:**

{0030}—\_\_\_\_\_1. (Currently Amended) In a cellular radio network having a plurality of base stations and a mobile switching center, a method for receiving and transmitting signals, the method comprising:

{0031}—\_\_\_\_\_receiving a plurality of radio signals at different frequencies using a single radio receiver at said base station;

{0032}—\_\_\_\_\_continuously scanning said incoming signals and saving said signals to a buffer with a first processor;

{0033}—\_\_\_\_\_reading, processing and time-multiplexing said buffered signals with a second processor;

{0034}—\_\_\_\_\_transmitting said time-multiplexed radio signal via a single physical link to a mobile switching center;

{0035}—\_\_\_\_\_demultiplexing said time-multiplexed radio signal into independent radio signals corresponding to said incoming signals at said mobile switching center with a third processor;

{0036}—\_\_\_\_\_processing said independent radio signals with said third processor; and

{0037}—\_\_\_\_\_routing said independent radio signals to the proper end users.

{0038}—\_\_\_\_\_2. (Currently Amended) The method defined in claim 1, wherein said cellular radio network comprises a Frequency Division Multiple Access network.

{0039}—\_\_\_\_\_3. (Currently Amended) The method defined in claim 1, wherein said cellular radio network comprises a Time Division Multiple Access network.

{0040}—\_\_\_\_\_4. (Currently Amended) The method defined in claim 1, wherein said cellular radio network comprises a Global System for Mobile Communications.

{0041}—\_\_\_\_\_5. (Currently Amended) The method defined in claim 1, wherein said cellular radio network comprises a Code Division Multiple Access network.

{0042}—\_\_\_\_\_6. (Currently Amended) A system for receiving and transmitting cellular radio signals in a cellular radio network, the system comprising:

{0043}—\_\_\_\_\_a radio receiver at a base station for receiving a plurality of radio signals at different frequencies;

{0044}—\_\_\_\_\_a first processor for continuously scanning said incoming signals and saving said signals to a buffer;

{0045}—\_\_\_\_\_a second processor for reading, processing and time-multiplexing said buffered signals;

{0046}—\_\_\_\_\_means for transmitting said time-multiplexed radio signal via a single physical link to a mobile switching center;

{0047}—\_\_\_\_\_a third processor for demultiplexing said time-multiplexed radio signal into independent radio signals corresponding to said incoming signals at said mobile switching center and processing said independent radio signals; and

{0048}—\_\_\_\_\_means for routing said independent radio signals to the proper end users.

{0049}—\_\_\_\_\_7. (Currently Amended) The system defined in claim 6, wherein said cellular radio network comprises a Frequency Division Multiple Access network.

{0050}—\_\_\_\_\_8. (Currently Amended) The system defined in claim 6, wherein said cellular radio network comprises a Time Division Multiple Access network.

{0051}—\_\_\_\_\_9. (Currently Amended) The system defined in claim 6, wherein said cellular radio network comprises a Global System for Mobile Communications network.

{0052}—\_\_\_\_\_10. (Currently Amended) The system defined in claim 6, wherein said cellular radio network comprises a Code Division Multiple Access network.